

Claims

- [1] A composition for coating organic electrode comprising: 3% to 20% by weight of a polyhydric alcohol, a polyol or a mixture thereof; 5% to 10% by weight of a primary alcohol having C1 to C5; 5% to 25% by weight of an amide, a sulfoxide or a mixed solvent thereof; 0.01% to 0.1% by weight of a surfactant and aqueous solution of polyethylenedioxythiophene(PEDOT) conductive polymers having nano- sized particle in a remainder; and wherein a concentration of polyethylenedioxythiophene(PEDOT) and polystyrenesulfonate(PSS) solid in the aqueous solution is 1.0% to 1.5% by weight of based on the total weight of solution, wherein a visible ray transmittance of organic conductive layer is more than 90% in case of coating, wherein a sheet resistance of layer is 300 to 900 Ω /sq.
- [2] The composition of claim 1, wherein said polyhydric alcohol, the polyol or the mixture thereof is at least one of alcohols selected from the group consisting of a ethyleneglycol, propyleneglycol, butanediol, neopentylglycol, diethyleneglycol, triethyleneglycol, methylpentanediol, hexanediol, trimethylolpropane, glycerine, ethylhexanediol, hexanetriol, polyethyleneglycol, polypropyleneglycol, polyoxypropylenetriol, polytetramethyleneglycol, sorbitol, and thereof a derivative.
- [3] The composition of claim 2, wherein said molecular weight of polyhydric alcohol or polyol is less than 300.
- [4] The composition of claim 1, wherein said amide solution is at least one of solvents selected from the group consisting of a formamide, N-methylformamide, N, N-dimethylformamide, acetamide, N-methylacetamide, N,N-dimethylacetamide, N-methylpropionamide, pyrrolidone, N-methylpyrrolidone, caprolactam and a tetramethylurea, and wherein said sulfoxide solvent is at least one of solvents selected from the group consisting of a methylsulfoxide, dimethylsulfoxide, sulfolane and a dimethylsulfone.
- [5] The composition of claim 1, wherein said surfactant is at least one of surfactants selected from the group consisting of a nonionic surfactant, anionic surfactant, cationic surfactant and a neutral surfactant, and a HLB(hydrophilic-lipophilic balance) is within 7 to 20.
- [6] The composition of claim 1, wherein said composition includes 0.01% to 0.05% by weight of a compound, containing a sulfonic acid as a dopant.
- [7] The composition of claim 6, wherein said dopant is at least one of compounds selected from the group consisting of a polystyrenesulfonic acid, p-toluenesulfonic acid, dodecylbenzenesulfonic acid, anthraquinonesulfonic acid, 4-hydroxybenzenesulfonic acid, methylsulfonic acid and a nitrobenzenesulfonic acid.

acid.

- [8] A method of manufacturing organic electrode having excellent transparency comprising steps of: stirring said composition of claim 1; spreading out said composition on a transparent substrate; drying up the substrate; and coating 0.2 to 2.0 μ m by thickness of coating layer.
- [9] A method of manufacturing organic electrode having excellent transparency comprising steps of: stirring said composition of claim 1; repeatedly dispersing said composition 2 to 10times per 3 to 10minutes with a ultra sonicator controlled by 20,000 to 40,000 μ m of frequency, 50 to 700W of power; spreading out said dispersed solution on a transparent substrate; drying up the substrate; and coating 0.2 to 20 μ m by thickness of coating layer.